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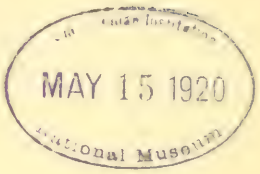

IX.—*List of the Birds of the Canary Islands, with detailed reference to the Migratory Species and the Accidental Visitors.* Part VI. APPENDIX A—APPENDIX B.

By DAVID A. BANNERMAN, M.B.E., B.A., M.B.O.U., F.R.G.S.

[Continued from p. 132.]

APPENDIX A,

Which includes all birds that have been recorded on evidence which requires further proof before the species can be admitted to the list of authentic occurrences. All birds in the Appendix are named binomially if any doubt exists as to which race they belong.

IT will be seen by a glance at the names which make up Appendix A that several of the species are most unlikely ever to occur again in the Canary Archipelago. It is equally certain that others whose names are included here will some day have to be transferred to the list of authentic visitors.

It has been anything but easy to draw up this list and determine which species should be given the "benefit of the doubt" of having occurred in the islands. Opinions are

sure to vary as to whether or not some of the species would have been placed better in Appendix B or even in the Systematic List, but judgment has been formed only after most careful investigation.

For ten years I have been working at the birds of this group and studying the writings of previous authors, so that I have formed very definite opinions on the merits and trustworthiness of the works consulted and of the records which they contain.

If any reasonable doubt exists as to whether or not a bird has occurred in the Canaries, I have included that species in Appendix A. It will always be an easy matter to add a species to the list of Authentic Visitors. It will be much more difficult to delete a species which has been included on insufficient evidence.

Notwithstanding, there is bound to be criticism of a list containing some 310 names, and I hope the criticism will be public, as the list published in 'The Ibis' is only a forerunner of a much larger work which I some day hope to publish.

The birds included in Appendix A number twenty-four, as follows :—

Family Fringillidæ.

Emberiza cia. Meadow-Bunting.

Emberiza cia Linn. Syst. Nat. 12th ed. 1766, p. 310—Type locality : S. Europe.

A member of the B. O. U., Mr. William Serle, kindly wrote to tell me that while staying in Gran Canaria he had observed a few of these Buntings at close range in a garden near Las Palmas on the 10th of May, 1910. No specimens were obtained, but Mr. Serle was convinced of his correct identification and watched the birds for some time through powerful glasses. I know of no resident bird or regular visitor with which he could have confused it.

Range. The Meadow-Bunting breeds in southern Europe and in winter visits northern Africa.

Family Motacillidæ.

Anthus campestris. Tawny Pipit.

Alauda campestris Linn. Syst. Nat. 10th ed. 1758, p. 166 —Type locality : Sweden.

The records of the Tawny Pipit occurring in the Canary Islands are meagre and rest on the evidence of Meade-Waldo, who wrote (Ibis, 1893, p. 191) : "I have seen this Pipit only in Fuerteventura, where it was common in sp ing."

Meade-Waldo was in Fuerteventura in March and April 1888, and in the middle of February and March 1889, and again in April 1890. In reply to my query as to whether he obtained any specimens, Mr. Meade-Waldo has kindly written to me under date 4 August, 1918: "With regard to *Anthus campestris,* I saw many in small flocks, especially the last time I visited Fuerteventura (April 1890). *I shot one or two* and gave them to Canon Tristram, but he did not skin them as he did not pay much attention to migrants when we had island forms to skin."

Bolle's notes (J. f. O. 1857, pp. 288, 289) given under the name of *Anthus campestris,* as also those under *Anthus trivialis* (J. f. O. 1854, p. 455), obviously refer to the common Pipit of the islands, *Anthus b. bertheloti.* There is no question of Meade-Waldo having fallen into this error ; he knew both forms well and collected many of the latter, but until specimens are secured I hesitate to include the Tawny Pipit amongst the authenticated visitors.

Polatzek writes (Orn. Jahrb. 1909, p. 126) that neither he nor Von Thanner has ever seen it.

Range. The Tawny Pipit breeds in Europe, south-western Asia, and north-west Africa ; it winters in tropical Africa. Dr. Hartert records it as far south as Senegambia. I have examined specimens in the British Museum from the following localities in Africa :—Morocco (no date), Tangiers (March and June), Egypt (February to April), Sudan (January), White Nile (April), Nubia (no date), Somaliland

(December, January, and April), Abyssinia (December, February, and March), Orange Free State (June!).

Family Regulidæ.

Regulus ignicapillus madeirensis. Madeiran Fire-crest.

Regulus madeirensis Harcourt, Sketch of Madeira, 1851, p. 118—Type locality: Madeira.

The Madeiran Fire-crest is said by Cabrera (Catálogo, p. 42) to occur accidentally in the woods of Tenerife. He did not possess a specimen, and it is probable that the bird has been wrongly identified, a particularly bright coloured Gold-crest being mistaken for a Fire-crest. I include it here, as Cabrera clearly shows that he did not confuse it with the Tenerifian Gold-crest, *Regulus regulus teneriffæ*, for he includes this as "*Regulus cristatus*," and in addition enumerates *Regulus satelles* Koenig, which is of course a synonym of *R. r. teneriffæ*. Cabrera was evidently not aware that Koenig had only renamed the island bird, which Cabrera knew as *R. cristatus*.

Range. The Madeiran Fire-crest is confined to the highlands of the island of Madeira.

Family Laniidæ.

Malaconotus poliocephalus. West African Grey-headed Bush-Shrike.

Lanius poliocephalus Licht. Verzeichniss der Doubletten des Zoologischen Museums, 1823, p. 45—Type locality: Senegambia.

There is only one record from the Canary Islands. Bolle (J. f. O. 1857, p. 275) says that he saw an example of *Laniarius icterus* Cuv. (=*M. poliocephalus*), which had been shot in Tenerife, in Dr. Binna's collection at Orotava.

Dr. Bolle certainly notes that the specimen of this rare Shrike had been procured in Tenerife; but he evidently did not shoot the bird himself, and it is much more likely to have been an imported skin.

Bolle was a careful ornithologist, and is certain to have

handled the bird himself and to have faithfully recorded what he was told. I have therefore assigned this species to Appendix A.

Dr. Antonia Binna's collection has unfortunately been quite lost sight of, and nothing seems to be known of the owner of this private collection or what has become of the birds which it contained.

Range. The West African Grey-headed Bush-Shrike is found in the West African subregion from Senegal to north Angola, ranging east to the Niam Niam country and Tanganyika.

Family Sylviidæ.

Melizophilus undatus. Dartford Warbler.

Motacilla undata Boddaert, Tabl. Pl. Enl. 1783, p. 40—Type locality: Provence.

Floericke (Aus der Heimat des Kanarienvogels, 1905, p. 51) says there is a specimen of this Warbler (*Sylvia provincialis*) in the Museum at Laguna, Tenerife, which was killed in a neighbouring town during the spring migration. Cabrera, whose collection is housed in the Laguna Institute, does not mention this bird in his Catálogo (1893), and Polatzek, who includes the species in his list on the authority of Floericke, remarks (Orn. Jahrb. 1909, p. 124) that the bird must have been obtained since Cabrera's Catalogue was published.

I have not had an opportunity of examining this skin. It may or may not be correctly identified. Floericke's assertions require to be very carefully sifted. In any case there is the possibility of its being a "trade-skin" which has crept in amongst the Cabrera collection of locally-shot birds. Unfortunately many of the birds in the Canary Museums are undoubtedly killed anywhere but in the Canary Islands.

Range. The typical form of the Dartford Warbler inhabits south-west Europe. Races have been described from Great Britain (*M. u. dartfordiensis*) and north-west Africa (*M. u. toni*).

Acrocephalus aquaticus. Aquatic Warbler.

Motacilla aquatica Gmelin, Syst. Nat. i. pt. 2, 1789, p. 953—Type locality: Carniola.

This Warbler is said to have occurred in the Canary Islands.

Webb and Berthelot (Orn. Canarienne, p. 13) go so far as to give Gran Canaria as its habitat, but without any further local information. If it has ever inhabited this island it would doubtless have frequented the Maspalomas Charco or the pools of Arguineguin—no other places in Gran Canaria would be suitable for its habitat (Ibis, 1912, p. 564).

Bolle quotes the above authorities (J. f. O. 1854, p. 453) under *Sylvia aquatica*, and the bird is also cited by Cabrera (Catálogo, p. 43) as *Calamodita schœnobœnus* Scop.

Recently Von Thanner has recorded (Orn. Jahrb. 1908, p. 214) that he saw an Aquatic Warbler ("*Calamoherpe aquatica*") in some close grass on the 14th of March, 1905, in Fuerteventura; the bird was not obtained.

Range. The Aquatic Warbler breeds in central and southern Europe and in north-west Africa. It probably winters in tropical Africa, but this is not known for certain.

Family Turdidæ.

Œnanthe isabellina. Isabelline Wheatear.

Saxicola isabellina Cretzschmar, Atlas zu Rüppell's Reise, Vögel, 1826, p. 52—Type locality: Nubia.

This species has only once been recorded, by Meade-Waldo (Ibis, 1889, p. 515), who notes that he saw a stuffed example in Cabrera's collection in Tenerife.

The record was omitted from Meade-Waldo's final list (Ibis, 1893), and in answer to my query as to why the bird was not then included, Mr. Meade-Waldo has kindly written to me as follows, under date August 4, 1918:—"At this length of time it is rather hard to remember things exactly, but if I noted *Saxicola isabellina* as being in Cabrera's collection, no doubt but that it was there, but it may have been

some form of Isabelline desert Wheatear which at present bears some other name."

As it is twenty-five years since Mr. Meade-Waldo published his last list, he may have omitted the Isabelline Wheatear from his final list with intent and the fact have escaped his memory after so long a period.

The bird is not mentioned by Cabrera in the list of his birds from the islands, and on the above evidence I do not feel justified in including the species amongst the authentic visitors.

Range. The Isabelline Wheatear breeds in Asia and winters partly in Egypt and eastern Africa and in India. It is very unlikely to occur in the Canary Islands again.

Family Picidæ.

? **Dryobates minor.** Lesser Spotted Woodpecker.

Picus minor Linn. Syst. Nat. 10th ed. 1758, p. 114—Type locality: Sweden.

The Lesser Spotted Woodpecker is first recorded by Busto (Topografia medica, 1864, p. 104) almost certainly in error.

Meade-Waldo (Ibis, 1889, p. 7) wrote of a visit to Gomera in 1888, "I feel almost sure I saw a Lesser Spotted Woodpecker."

Cabrera included it (Catálogo, 1893, p. 35) as a species met with accidentally in the Canaries on the authority of Busto and Meade-Waldo.

Polatzek remarked (Orn. Jahrb. 1909, p. 121) that if *D. minor* occurred in Gomera he would certainly have seen it, but the only Woodpecker which he thought he saw there was larger than this species.

When two such observers as Meade-Waldo and Polatzek both *think* that they saw a Spotted Woodpecker of some form in the island of Gomera, we cannot entirely dismiss the records as valueless and place them in Appendix B. There is no Woodpecker of any species known to inhabit this island, but any ornithologist visiting Gomera should keep a particularly sharp look out in the hope that he may solve the problem of the mystic race. It is extremely unlikely that if a

Woodpecker is ever discovered in Gomera that it will prove to be any race of the Lesser Spotted. It is certainly very remarkable that the islands of Palma and Gomera have no Woodpecker living upon them when two races of *D. major* are found in Tenerife and Gran Canaria respectively.

Range. The typical Lesser Spotted Woodpecker inhabits northern Europe. Numerous races are recognised in Europe, Asia, and northern Africa (Algeria and Tunisia). *D. minor* is said once to have inhabited the Azores, where it is now apparently extinct.

Family Caprimulgidæ.

Caprimulgus europæus. Nightjar.

The Nightjar is recorded by several observers on somewhat fragmentary evidence. It is uncertain which form has occurred, if any, in the Canaries.

Busto includes the "*Caprimulgus*" in his list (Topografia medica, p. 104).

Cabrera (Catálogo, p. 36) notes that he saw one at Tejina (Tenerife), but the bird does not appear to have been obtained.

Polatzek was told in Fuerteventura that some of these birds were occasionally seen by day in holes in the rocks, resting on their way through the islands (Orn. Jahrb. 1909, p. 119). No specimens have ever been obtained, and local evidence in the Canaries is most unreliable.

Range. Typical *C. europæus europæus* Linn. (Syst. Nat. 10th ed. 1758, p. 193—Type locality: Sweden) breeds in Europe and winters in Africa ranging to the Cape. It passes down the west coast of Africa and has occurred in Cameroon.

A small race, *C. e. meridionalis* Hartert (Ibis, 1896, p. 370), occurs in Spain, and in some of the islands and countries bordering the Mediterranean as well as in north-west Africa.

Caprimulgus ruficollis. Red-necked Nightjar.

The evidence of this species occurring in the Canary Islands is not very satisfactory.

It is mentioned by Webb & Berthelot, who say (Orn.

Canarienne, p. 24) "it arrives sometimes in the Canaries at the beginning of autumn." It is not included in Busto's list, as has been erroneously stated.

Cabrera mentions it as an accidental migrant but according to his catalogue had no skin in his collection, although Polatzek (Orn. Jahrb. 1909, p. 119) notes that Cabrera is said to have shot a specimen in Tenerife.

Dr. Hartert, who examined Cabrera's collection, tells me (*in litt.*) that he could not find a skin of this species, so that a mistake has probably been made. Hartert correctly states (Vög. pal. Faun. p. 851) that its occurrence in the Canaries is doubtful.

C. r. ruficollis has occurred in Madeira, and there is no reason why it should not have done so in the Canary group.

Range. The Red-necked Nightjar [*Caprimulgus ruficollis* Temm. Man. d'Orn. 2nd ed. i. 1820, p. 138—Type locality: Algeciras] is an inhabitant of southern Spain, Portugal, and Morocco.

A subspecies, *C. r. desertorum* Erlanger [J. f. O. 1899, p. 521—Type locality: Tunisia], takes its place in Algeria and Tunisia. Until an example can be examined it must remain doubtful, which (if either) has occurred in the Canaries.

Family Meropidæ.

Merops orientalis viridissimus. African Green Bee-eater.

Merops viridissimus Swains. Birds West Africa, ii. 1837, p. 82—Type locality: Senegal.

Cabrera says that this species, which he incorrectly calls *M. viridis** Gmel., occasionally appears in the Canary Islands

* *Merops viridis* Linn. was described (Syst. Nat. 10th ed. 1758, p. 117) from Java, Benghalia, and is applicable to the Indian Green Bee-eater. I prefer to use Swainson's name for the African Green Bee-eater, as his bird was described from Senegal. It is obviously the African bird which Cabrera intends.

Merops viridis Gmelin = *M. viridis* Linn.

Hartert has shown (Nov. Zool. xvii. p. 482) that *M. viridis* Linn. has nothing to do with *M. viridissimus* at all but must be applied to the bird commonly known as *M. sumatranus*, and consequently *M. viridissimus* is the correct name for the African Green Bee-eater.

in company with *M. apiaster* (Catálogo, p. 38). He had no specimens, however.

Range. The Green Bee-eater inhabits north Africa and extends south as far as Senegambia. Various races have been described.

Family Alcedinidæ.

Halcyon leucocephala. White-headed Kingfisher.

A specimen of what was probably *H. leucocephala acteon* or possibly *H. leucocephala leucocephala* was identified by Bolle (J. f. O. 1857, p. 319) in the Binna collection in Tenerife as *Halcyon rufiventris* Dohrn (= *H. erythrorhynchus* Gould = *H. leucocephala acteon*).

The bird was said to have been obtained in Tenerife. Polatzek, referring to this specimen, says that Cabrera *told* him that it was said to have been shot "in the mountains" (Orn. Jahrb. 1909, p. 121).

Cabrera (Catálogo, p. 39) notes that he never observed this bird in the Canaries, but remarks that it may occur accidentally, as it is so common in the Cape Verde Islands.

Hartert rightly rejected this species from his list (Nov. Zool. 1901, p. 307) on the ground that it may have been brought to the island as a skin. Very little seems to be known of the Binna collection, so often referred to by older writers. Whether this colletion was composed only of locally killed specimens is not stated by anyone.

Range. H. l. leucocephala ranges from Senegal southwards, and across Africa. *H. l. acteon* is confined to the Cape Verde Islands. Lesson described *Dacelo acteon* in Traité d'Orn. 1831, p. 247—Type locality: "Cap Vert ('San Yago')." The type locality is supplied by Pucheran (Rev. et Mag. de Zool. 1853, p. 392), *cf.* Claude Grant (Ibis, 1915, p. 266). Lesson gives no type locality himself. Either form might have found its way to the Canary Islands.

Family Strigidæ.

Otus scops scops. Scops Owl.

Strix scops Linn. Syst. Nat. 10th ed. 1758, p. 92—Type locality : Italy.

The status of the Scops Owl in the Canary Islands is still doubtful, but I believe it may eventually have to be included in the authentic list.

I have been unable to trace any genuine locally killed specimens; as, however, the species has been quoted freely as *breeding* in the Canary Islands, I append all that is definitely known to me concerning it. The following notes can only of course refer to the typical bird.

In 1902 Polatzek saw in Lanzarote two stuffed examples of this Owl; without any data he could not establish whether they had been killed in Lanzarote or not, but he notes that the species is said to occur very seldom in the island. The two specimens mentioned, he adds, were sent from Lanzarote to Tenerife amongst a collection of birds for sale (Orn. Jahrb. 1908, p. 161). Polatzek notes that to his personal knowledge no more were "killed" up to 1905 (he left the Canary Islands for good in September 1904). He remarks in this paper that "Information concerning the breeding of this species does not seem to be well authenticated."

In 1904 the above-mentioned two Owls were offered for sale to Von Thanner in a market-place in Tenerife. This ornithologist (who is apparently basing his supposition on the opinion of someone else) says that he believes it breeds in Lanzarote in the palm-trees and is convinced it is to be found in Fuerteventura also (Orn. Jahrb. 1905, pp. 60, 61).

It is certainly much more likely that *O. scops scops* should be found in the Canary Islands than the following species.

Range. The Scops Owl breeds in southern Europe and north-west Africa, migrating in winter (on the west coast) to Senegambia.

Carine noctua. Little Owl.

The claim of the Little Owl to a place in this list depends on the important queries

(1) What species is *Noctua minor* Brisson from the Canary Islands, as interpreted by Serra?

(2) Was Serra's identification correct?

Under the above name Serra recorded (Ornitologia Canaria) a bird which he collected ("*recogido*") at Tegueste in Tenerife. I have not been able to examine Serra's original work for myself.

Dr. Hartert is of the opinion (Nov. Zool. 1901, p. 307) that *N. minor* = *Athene* (*Carine*) *noctua*, or perhaps a north African subspecies.

Cabrera considered "*Noctua minor*" to be a resident bird in Tenerife (Catálogo, p. 34), but Polatzek (Orn. Jahrb. 1908, p. 161) is inclined to think that Cabrera really intended the Scops Owl (*Otus scops*) when he wrote *N. minor*!

I have placed this species in Appendix A although I am by no means certain that it should not be relegated to Appendix B.

If Dr. Hartert's view is correct, the Little Owl which is said to have found its way to the Canaries may have been *C. n. noctua*, *C. n. glaux*, or even (though less probably) *C. n. saharæ*.

Range. Typical *C. n. noctua* [*Strix noctua* Scopoli, Annus Hist. Nat. 1769, p. 22—Type locality: Carniola] is restricted to Europe.

C. n. glaux [*Noctua glaux* Savigny, Descr. Egypte, Syst. Ois. Egypte, 1810, p. 45—Type locality: Egypt] is a subspecies confined to north Africa ranging from Egypt to Morocco.

C. n. saharæ [*Strix saharæ* Kleinschmidt, 'Falco,' v. 1909, p. 19—Type locality: Mouleina near Biskra] appears to inhabit southern Tunisia, southern Algeria, south of the Atlas, and south-east Morocco, south of the Atlas.

Family Falconidæ.

Hieraëtus fasciatus. Bonelli's Eagle.

Aquila fasciata Vieill. Mém. Soc. Linn. Paris, ii. 1822, p. 152—Type locality: Montpellier, S. France.

Meade-Waldo, writing in 'The Ibis,' 1893, p. 185, and giving a list of birds which have been seen almost without doubt, although never actually procured, included this Eagle and says "... an Eagle seen several times above Esperanza .... which almost beyond a doubt was Bonelli's Eagle (*Nisaëtus fasciatus*)."

I give this record for what it is worth. Meade-Waldo should certainly know the bird well.

Range. Bonelli's Eagle ranges over the greater portion of southern Europe, and is generally distributed in Spain and Portugal. In Africa it is found in Tunisia, Algeria, and Morocco, and in the last named country is said by Erlanger to be more abundant south of the Atlas (*cf.* Whitaker, Birds of Tunisia, ii. p. 109).

Milvus migrans. Black Kite.

Falco migrans Boddaert, Table Planches Enl. 1783, p. 28, no. 472—Type locality: unknown.

I doubt whether a specimen of the Black Kite has ever been shot in the Canaries.

Cabrera records (Catálogo, p. 31) that this species (*M. niger*) comes on migration at uncertain times (De paso en épocas no determinadas).

Polatzek also notes that it passes through the Canary Islands occasionally, but states that there are no specimens (Orn. Jahrb. 1909, p. 119).

Dr. Hartert believes that there may have been some confusion between the Black and the immature Common Kite (Nov. Zool. 1901, p. 307).

Range. The Black Kite breeds in central and southern Europe, in south-western Asia, and in northern Africa from Morocco to Tunisia. In winter it migrates to Africa, ranging to Madagascar on the east.

Family Anatidæ.

Anser anser. Grey-Lag Goose.

Anser anser Linn. Syst. Nat. 10th ed. 1758, p. 123—Type locality : Sweden.

It seems fairly certain from the accounts of ancient writers that an extensive lake was once to be found in Tenerife near the town of Laguna, from which lagoon the ancient capital of Tenerife takes its name. That this lagoon teemed with wildfowl seems to be certain, for Viera mentions how the Captain General of the Canaries amused himself in the citadel of Laguna by watching the Falcons which were dashing down upon the various waterfowl, forced by the peasants with their slings to rise from the surface of the lake.

Cabrera in his Catálogo, p. 68, under *Anser cinereus* Mey., wrote "Esta especie, mencionada por Viera y Manrique, fué en un tiempo frecuente en las lagunas de Tenerife." Viera gives an account of an *Anser* under the name "Ganso" in his Diccionario, p. 306 (1866), but does not mention the species.

It is quite possible that this Goose did occur in olden days in Tenerife, and I have therefore included it in Appendix A, although it stands to reason that no very definite proof can exist.

Range. The Grey-Lag Goose breeds in the extreme north of America and in northern Europe, resorting in winter to southern Europe and northern Africa, extending eastwards to China.

Querquedula querquedula. Garganey.

Anas querquedula Linn. Syst. Nat. 10th ed. 1758, p. 126—Type locality : Sweden.

The Garganey is included solely on the very poor evidence of Cabrera, who in his list (Catálogo, p. 68) includes "*Querquedula circia*" as an accidental visitor to the Archipelago. Cabrera did not have a specimen in his own collection and gives no further information of the specimens seen.

Polatzek mentions the bird amongst the doubtful occurrences (Orn. Jahrb. 1909, p. 132).

Range. The Garganey breeds throughout the greater part of the Palæarctic Region—wintering in northern and tropical Africa, southern Asia eastwards to Japan, and even reaching New Guinea.

Its occurrence in the Canary Islands as a straggler in winter might therefore be expected.

Family Gruidæ.

Grus grus grus. Common Crane.

Ardea grus Linn. Syst. Nat. 10th ed. 1758, p. 141—Type locality : Sweden.

The Common Crane was mentioned by Meade-Waldo in his list (Ibis, 1893, p. 199, under species No. 82) from the "Eastern Islands," on the evidence of the Spanish fishermen who described to him a large grey bird as occasionally appearing, which he concluded could only have been this species. It seems hardly worth while to include this bird even in Appendix A on such very doubtful evidence, but as it is a species which might well be expected to occur on rare occasions in the Archipelago, I include it for what it is worth.

Range. The Crane breeds in Europe from Scandinavia southwards to Spain and Italy. It winters in north Africa from Tunisia to Morocco, extending in east Africa to Abyssinia.

Family Puffinidæ.

Puffinus gravis. Greater Shearwater.

Puffinus gravis O'Reilly, Voy. to Greenland, 1818, p. 140—Type locality : Greenland to Newfoundland.

Cabrera particularly mentions this species as *Puffinus major* Fabr. in his List of Birds found in the Canary Islands (Catálogo, p. 65) in addition to "*Puffinus cinereus* Kuhl" (= *P. k. fortunatus*) and "*Puffinus anglorum* Kuhl" (= *P. p. puffinus*). He says it is only found in company with these two species.

I have not been able to trace a specimen of this Shearwater from the Canarian Seas. It is more than likely to occur there, but would easily pass unnoticed at sea amongst the countless numbers of *Puffinus kuhli fortunatus*, from which, however, it may be easily distinguished by its distinct brown cap.

Range. The Greater Shearwater breeds on Tristan da Cunha, and probably on other islands of the southern Atlantic, and ranges over the entire Atlantic Ocean from Greenland and Iceland to the Falkland Islands and the Cape of Good Hope.

Family Rallidæ.

Fulica cristata *. African Crested Coot.

Fulica cristata Gmel. Syst. Nat. 10th ed. i. pt. 2, 1789, p. 704—Type locality : Madagascar.

Cabrera is responsible for the inclusion of this bird. It figures in his list (Catálogo, p. 61) as well as *Fulica atra*, so that it is obvious he was aware of two different birds. Of the Crested Coot, Cabrera remarks "Especie sumamente rara en Canarias, pero que suele encontrársela en compañia de la anterior" (*F. atra*).

Range. The African Crested Coot inhabits Africa generally.

Porphyrio cæruleus. Purple Gallinule.

Fulica cærulea Vandelli, Mem. Acad. Real. Sci. Lisboa, i. 1797, p. 67—Type locality : Portugal.

The Purple Gallinule has been obtained on one occasion in Tenerife, where Cabrera saw a specimen which had been caught there (Catálogo, p. 61). Previously to this [*Porphyrio cæsius* Barrère] is mentioned by Mompó [Catálogo de las Aves de Tenerife, 1876, p. 256] from the Canary Islands, but no great reliance can be placed on this record. Neither am I inclined to include the above record of Cabrera's as a genuine visitor.

* *Fulica cristata* may be distinguished from *Fulica atra* (1) by the entire absence of white tips to the inner secondaries; (2) by having knob-like excrescences at the top of the frontal shield.

I know that Gallinules are occasionally shipped in crates to the Canary ports. In fact, my mother-in-law kept four imported Gallinules near Las Palmas, in the chicken-run in 1911–12. These were imported from Dakar and belonged to another species, *P. porphyrio* Linn. Eventually one of these birds escaped, and I myself saw it fly off towards the golf links; the other three were brought to England and are now living in the Zoological Gardens in Regent's Park, where I understand they have bred. Cabrera's bird may quite possibly have been an "escape."

Range. The Purple Gallinule (*P. cæruleus*) inhabits the countries bordering the Mediterranean from Portugal and Morocco to Sicily. *P. porphyrio* inhabits the greater part of Africa, and if either race occurs in the Canaries it is probably this form.

Family Columbidæ.

Columba palumbus. Wood-Pigeon.

Cabrera mentions the Wood-Pigeon in his list as an occasional, but not very frequent, migrant, and notes that in some years it is only to be met with in the mountains of Aguirre, near Santa Cruz de Tenerife (Catálogo, p. 52); he says that it is cited by Berthelot, but I can find no mention of it in his book. Also by Busto and Mompó, but as the pigeons of the Canaries were then imperfectly known no reliance can be placed on these records.

Range. The typical Wood-Pigeon inhabits Europe, and ranges to north-west Africa. Birds from the Azores (*Columba palumbus azorica*) have been regarded as separable. It is possible that chance stragglers from that group of islands have occurred in the Canaries.

Columba trocaz. Madeiran Pigeon.

Columba trocaz Heineken in Brewster's Edinburgh Journal Sci. 1829, p. 230—Type locality: Madeira.

This Pigeon is said by Cabrera (Catálogo, p. 53) to arrive only on rare occasions ("*aunque rara vez*") in the Canaries.

Webb & Berthelot (Orn. Canarienne, p. 26), though

correctly including *Columba junoniæ* [*C. laurivora* auctorum] from the Canary Archipelago, confused it with the Madeiran bird, believing both to be the same species. This may have led Cabrera to have included *C. trocaz* in his list, although he includes correctly the three resident pigeons of the Canary Islands.

It is, of course, quite within the bounds of possibility that a specimen of *C. trocaz* might find its way to the Canaries from Madeira, but that it arrives even "on rare occasions" I cannot believe. Its occurrence is best looked upon with considerable suspicion until a genuine example is obtained; Cabrera had not a skin in his collection.

Range. C. trocaz is confined to the island of Madeira.

Streptopelia senegalensis. Senegal Turtle-Dove.

Turtur senegalensis Linn. Syst. Nat. 12th ed. 1766, p. 283 —Type locality: Senegal.

The Senegal Turtle-Dove is first recorded by Bolle (J. f. O. 1857, p. 332) from the Canaries. He includes *Turtur senegalensis* from Fuerteventura, and as breeding in that island.

Cabrera notes (Catálogo, p. 53) that it is of accidental occurrence ("Viajera accidental"), only met with in the chestnut woods of Santa Ursula and Victoria, in Tenerife.

Cabrera had no skins in his collection, and I feel very doubtful about the correct identification of this species.

Range. The typical Senegal Turtle-Dove (*S. senegalensis senegalensis*) inhabits tropical Africa from Senegambia to Sierra Leone, eastwards to northern Nigeria: the exact extent of its range is not known. The races of the Dove and their distribution have been fully dealt with by Dr. Hartert (Nov. Zool. xxiii. pp. 81–83). Since then Messrs. Sclater & Mackworth-Praed have still further split up this group (Ibis, 1920). Both these papers should be consulted.

Appendix B.

List of Birds that have been recorded from unreliable sources, so that the records can be dismissed as absolutely valueless.

Many of the birds in this Appendix have been quoted by more recent writers as authentic migrants, but without additional proof of their genuine occurrence in the Canary Archipelago. Most of the species here included were first recorded by Ledru in 1810 and then by the Spanish writers from 1866 to 1882.

Birds whose names appeared in these old lists through having obviously been wrongly identified are not included here. Very few of the resident birds in the Archipelago bore the names which they now possess, for they were not then recognised as distinct from the Continental forms.

For instance, the Shrike was then known as *Lanius algeriensis* or *Lanius meridionalis*, the Titmice as *Parus major* and *Parus cæruleus*, etc., etc.

None of these names are included in this list, for it is quite obvious that they refer to species which we now know under other names, and that the Continental species never really occurred in the Archipelago.

Another case in point where names might be included in this Appendix but are best left out altogether, is afforded in Cabrera's work. This author notes in his list "*Regulus cristatus*," by which he, of course, intends *Regulus r. teneriffæ*; but he also includes, as if it referred to an entirely different species, "*Regulus satteles*," which name is a synonym of *R. r. teneriffæ*.

I have not in this Appendix given the original reference and type locality of the species included.

Instead I have, when possible, given a reference to Cabrera's work, "Catálogo de las Aves del Archipiélago Canario," 1893 (quoted as "Catálogo, 1893"), for this author quotes, amongst others, from the works of the early Spanish authors—Viera, Busto, Manrique, Mompó, and Serra—and is the first author to give a complete list of the birds of the Canary Archipelago since Moquin-Tandon, Webb, and Berthelot wrote their monograph in 1841.

In every case where I have been able to examine the original work I have given a page reference to these early Spanish writers, for they are for the most part responsible for the names which appear in this Appendix.

Since writing the Systematic List, which has already appeared in print, I have discovered that three of the works of the old Spanish writers mentioned by me in Part I., p. 89, of my paper are in the Tring Museum. The first is:—

Diccionario de Historia Natural de las Islas Canarias ó índice alfabético descriptivo de sus trés reinos Animal, Vegetal y Mineral. Por D. José de Viera y Clavijo.*

This Diccionary contains the names of a number of birds indexed under the Spanish name for the species, the Latin generic name and sometimes also the specific name being included in brackets, *i. e.*, **Garajao** (STERNA), or again **Engaña muchachos** (AVIS CURRICULA, Buff.), the first named being the Tern ? species, the second being the Courser (*C. gallicus*)! Unless we happen to know the Spanish equivalent of the bird's name it is therefore anything but easy to follow Viera's List of Birds, especially as they are mixed up with names of plants and minerals!

I do not put very much faith in the records appearing in this work and many have been relegated to Appendix B, when I had no further evidence from other sources of the occurrence in the Canary Islands of species mentioned by Viera.

The next work which I have now examined is that of Busto y Blanco, a book entitled 'Topografia medica de Las Islas Canarias,' published at Sevilla in 1864. This work contains a bare list of names of birds (pp. 103–105). Seventy-seven species are enumerated arranged under four columns thus:

Orden. *Familia.* *Nombres técnicos.* *Nombres vulgares.*

The spelling of the names is often obviously incorrect, no references are given, authors' names are not mentioned, and although the Spanish name of each bird is given it is

* Published at Las Palmas de Gran Canaria, 1866.

nevertheless often difficult to determine what species is intended.

The third work studied is certainly the most important. It appeared in the form of a paper entitled "Catálogo de las Aves de Tenerife observadas por Don Vincente Monró," and was published in the 'Anales de la Sociedad Española de Historia Natural,' Tom v. pp. 241–258. Madrid, 1876. Sixty-three species are enumerated, and under the majority of the species appear notes on their nesting habits. Apparently these nesting notes do not refer to the birds in the Canary Islands but to their allied forms in Spain!

These rare books can be seen in the magnificent library of the Tring Museum. I have taken pains to make full use of Lord Rothschild's and Dr. Hartert's kindness in lending them to me, a privilege which I deeply appreciate and here acknowledge.

Had I seen these works earlier they would have made practically no change in the systematic List of Authentic Species which I have already published, the majority of the records belonging to the following Appendix B.

In Part I. of this paper, p. 90 (Jan. 1919), I included, when possible, the dates when naturalists actually worked in the Canaries apart from the dates of publication of their various works. In this connection I omitted to note that Ledru (*cf.* Part I. p. 86) appears to have first sighted the island of Palma on the 25th of October, 1796, and says that he remained one hundred and twenty-nine days in the group, sailing for the West Indies on the 15th of March, 1797. Many of his observations are quoted in the following pages.

Likewise in the "List of Publications" consulted, which I published on pp. 86–89 of Part I., I omitted to mention the work of Dr. Curt Floericke, entitled "Aus der heimat des Kanarienvogels," 1905, pp. 1–107 (Vienna). As noted elsewhere, this work is most unreliable, and has been severely criticised by Polatzek in several of his papers. It is therefore suitably united with Appendix B.

The Birds included in Appendix B number 55, as follows :—

Pastor roseus. Rose-coloured Pastor.

Mentioned as a possible Rare Visitor to the Eastern Canaries by Bolle (J. f. O. 1857, p. 267). The bird has never been known to occur.

Spinus spinus. Siskin.

It is obvious that the Siskin should never have been included in the Canarian Avifauna.

Fringilla spinus Linn. is first mentioned by Ledru (Voyage aux îles de Ténériffe, vol. i. 1810, p. 181), and next by Webb & Berthelot (Orn. Canarienne, p. 23) in their lists from Tenerife.

Bolle, in his first paper (J. f. O. 1854, p. 459), says that the Siskin nests in the pine woods and distinguishes it from the Canary (*Serinus canarius*). In his next paper Bolle (J. f. O. 1857, p. 317) corrects this statement and notes that *Chrisomitris spinus* Boie is certainly only a rare visitor to the islands now that the Elder-tree is no more. Bolle continues that in a letter to him Berthelot "acknowledged openly that he knew very little about the Siskin as a Canarian bird, but thought he had brought back a skin with him to Paris." Bolle points out that Berthelot had very little to do with the 'Ornithologie Canarienne,' which was written by Moquin-Tandon from Berthelot's notes.

Mompó includes this species in his 'Catálogo de las Aves de Tenerife' (1876), p. 251.

"*Chrisomitris spinus*" is also cited by Cabrera (Catálogo, p. 50), whose remark that it is an accidental migrant is doubtless based on the evidence of the writers mentioned above, for he notes that the bird is included by Mompó; and, after noting that it nests in the pines, remarks that it is a very rare bird of passage and that the only specimen which he saw was caught in January 1873 and appeared to be a young male.

Pyrrhulauda modesta. Finsch's Lark.

In the J. f. O. 1864, p. 412, Otto Finsch described a bird as *Pyrrhulauda modesta* which he said came from the Canary Islands. It was described from a solitary female example and at the time evoked considerable discussion. Finsch compared it with *P. nigriceps* Gould and with *P. melanauchen* Cab.

Cabanis (J. f. O. 1868, p. 219) believed that *P. modesta* was the female of *P. nigriceps*.

Finsch, in answer to this, wrote (Trans. Zool. Soc. vii. p. 275) that the female skin which he described as *P. modesta* was more closely allied to *P. melanauchen* than to *P. nigriceps*.

Godman (Ibis, 1872, p. 224) pointed out that the bird may not have come from the Canaries in the first instance. Finsch gave no evidence in support of this.

Sharpe (Cat. Birds, xiii. p. 651) remarks in a footnote β that he was unacquainted with the bird.

Whatever species this bird may subsequently turn out to have been, it certainly did not come from the Canary Islands. The name of the collector is not given by any of the authorities who handled the bird. As a species of *Pyrrhulauda* inhabits the Cape Verde Islands (*P. nigriceps*), it is very probable that this is the real locality from which the skin of *P. modesta* Finsch originally came.

Loxia curvirostra. Crossbill.

Busto is the first to mention this bird (Topografia medica, 1864, p. 104).

Cabrera (Catálogo, 1893, p. 51) includes it on Busto's authority.

Fringilla cœlebs spodiogenys. Tunisian Chaffinch.

First included by Mompó (Catálogo Aves Tenerife, 1876, p. 250), obviously thus naming the resident Chaffinch incorrectly.

Cabrera has himself confused the Chaffinches badly

(Catálogo, 1893, p. 49): excluding the Blue Chaffinch, he enumerates *Fringilla tintillon* (for *F. c. canariensis*), *Fringilla palmæ* (for *F. c. palmæ*), and *Fringilla spodiogena* as an accidental bird of passage.

Moreover, he gives *F. africana* Le Vaill. as a synonym of *F. spodiogena*, although these are two different races of the Chaffinch.

It is evident that Cabrera believed these two north African forms to be one and the same, and that it appeared accidentally in the Canaries.

It is probable that the Hierran Chaffinch (*F. c. ombriosa*), which has only recently (1913) been recognised as a distinct race, has been confused.

Emberiza citrinella. Yellow Hammer.

Ledru (Voyage aux îles de Ténériffe, vol. i. 1810, p. 182) includes *Emberiza citrinella* without further note.

Busto (Topografia medica, 1864, p. 104) gives it in his list, but Mompó and Viera do not appear to include it.

Cabrera (Catálogo, 1893, p. 51) notes that it is mentioned by "most authors" but does not mention these authors by name.

Emberiza hortulana. Ortolan Bunting.

Busto includes it (Topografia medica, 1864, p. 104).

Cabrera notes it (Catálogo, 1893, p. 51) on the authority of Ledru and Busto. I cannot find it mentioned anywhere in Ledru's 'Voyage aux îles de Ténériffe,' vol. i. Two "Emberizes non déterminés" are given, however, in addition to those we can fix.

Galerida cristata. Crested Lark.

Busto mentions this Lark (Topografia medica, 1864, p. 104).

Included by Cabrera (Catálogo, 1893, p. 52), on the authority of Busto, as a bird of passage.

Various forms of this species are recognised in Africa.

Motacilla lugubris. Pied Wagtail.

Motacilla lugubris Temm. is first mentioned by Ledru (Voyage aux îles de Ténériffe, etc., vol. i. 1810, p. 183).

Cabrera (Catálogo, 1893, p. 44) includes it on the authority of Ledru (*l. c.*) and Busto (Topografia medica, p. 103) as a rare accidental visitor.

I cannot find that either Ledru or Busto mention it.

Sitta cæsia. Nuthatch.

Bolle recorded the Nuthatch (J. f. O. 1857, p. 320) purely on native information as occurring in the Mercèdes Woods in Tenerife.

He has been quoted by Cabrera (Catálogo, 1893, p. 39).

Sitta europæa. European Nuthatch.

Ledru mentions this species (Voyage aux îles de Ténériffe, vol. i. 1810, p. 182).

Cabrera includes the bird (Catálogo, 1893, p. 39) on the authority of Ledru, remarking that it has probably been confused with *S. e. cæsia.*

Lanius excubitor elegans. Elegant Shrike.

Cabrera includes this Shrike (*Lanius hemileucurus* Finsch & Hartl.) on his own responsibility from Fuerteventura (Catálogo, 1893, p. 47).

This North African race has probably been confused with the resident Shrike *Lanius excubitor kœnigi.*

Cabrera erroneously refers to the Canary Island form under the name *Lanius algeriensis*, for it was then considered identical with this Algerian race. It has since been separated, however. Cabrera evidently considered there were two distinct races of the Grey Shrike in the Canaries, as he also mentions *L. e. elegans* under the name *L. hemileucurus* Finsch & Hartl.

Lanius minor. Lesser Grey Shrike.

According to Cabrera (Catálogo, 1893, p. 47), Serra (Ornithologia Canaria, 1879–1882) is responsible for the

inclusion of this bird in the Canarian List, as he records an example killed on the coast of Tenerife. A confusion with *Lanius excubitor kœnigi*—the Grey Shrike of the islands—is probably responsible for the error.

I have not seen Serra's publication, but believe from Cabrera's account of species No. 38 that *L. minor* is the only Grey Shrike mentioned in Serra's list. The inference is obvious.

Sylvia subalpina. Subalpine Warbler.

This species has certainly never occurred in the Canary Islands.

Godman in his paper (Ibis, 1872, p. 175) has simply transferred the name *Sylvia passerina* Lath., as employed by Webb & Berthelot (Orn. Canarienne, p. 15) and Bolle (J. f. O. 1854, p. 454), to *Sylvia subalpina* Bonelli without any explanation of his action. Godman doubtless thought the description of *S. passerina* given by Webb & Berthelot applicable to the Subalpine Warbler and to no other bird.

This error has been copied by Cabrera (Catálogo, p. 42), but Hartert, Polatzek, and I detected the mistake, and the first-named pointed it out many years ago in Nov. Zool. 1901, p. 308.

Sylvia orphea. Orphean Warbler.

Busto mentions this species (Topografia medica, 1864, p. 103).

Curruca orphea Temm. is included by Cabrera in his list (Catálogo, 1893, p. 41) on the authority of Busto (*l. c.*).

Sylvia passerina. [Species indeterminable.]

Sylvia passerina Lath.; Webb & Berthelot, Orn. Canarienne, 1841, p. 15; Bolle, J. f. O. 1854, p. 454.

S. passerina Temm.; Bolle, J. f. O. 1857, p. 282.

To begin with the name *Sylvia passerina* of Gmelin, Latham, and Temminck is absolutely indeterminable, though *Motacilla passerina* Gmelin has been fixed by Hartert on to

the Garden Warbler, while in Latham's description the bird is said not to occur in England. What is beyond doubt, however, is that *Sylvia passerina*, as reported from the Canary Islands, refers to the *male* of *Sylvia conspicillata bella*, the Canarian race of the Spectacled Warbler.

Godman in his list of Migratory Birds of the Canaries and Madeira (Ibis, 1872, p. 175) transfers *S. passerina* Temm., as used by Webb & Berthelot and Bolle, to the Subalpine Warbler (*Sylvia subalpina* Temm.) without any apparent justification.

Hypolais polyglotta. Melodious Warbler.

Mompó is the first author to note this bird (Catálogo de las Aves de Tenerife, 1876, p. 247), and says "it builds its nests in the vines . . . . is a resident and very common." He must surely have confused it with the Chiffchaff.

Cabrera includes *Hypolais polyglotta* Vieill. (Catálogo, 1893, p. 42) on the authority of Mompó.

The Melodious Warbler occurs in Morocco, ranging to the Rio de Oro and extending as far south as Senegambia. Its presence in the Canaries as a rare visitor might therefore be expected.

Turdus viscivorus. Missel Thrush.

Busto is responsible for the inclusion of this species. It figures in his list (Topografia medica, 1864, p. 103) under the name of *Merula viscivorus*.

Cabrera mentions it in his list (Catálogo, 1893, p. 46).

If any Thrush visited the Canaries it would probably belong to the north-west African race *T. v. deichleri*. The typical form does not winter south of the Mediterranean countries.

Hylocichla ustulata swainsoni. Swainson's Thrush.

Polatzek (Orn. Jahrb. 1909, p. 125) mentions *Turdus swainsoni* Cab. on the authority of Busto, without any apparent justification.

Although Busto is apparently responsible for the inclusion of this species, I cannot find the bird mentioned in Busto's

list. He mentions only *Turdus merula, musicus, pilaris, solitarius* and *Merula viscivorus* (Topografia medica, pp. 103, 104).

Turdus swainsoni of Cabanis is a north American species which has never occurred outside the New World.

Monticola solitarius. Blue Rock-Thrush.

Busto is the first author to mention this bird (Topografia medica, 1864, p. 104).

Cabrera gives it on the above authority (Catálogo, 1893, p. 46).

Luscinia luscinia. Eastern Nightingale.

First mentioned by Busto (Topografia medica, 1864, p. 103).

Cabrera gives it as *Lusciola philomela* Bechst. in his Catálogo, 1893, p. 44, on the authority of Busto.

Cinclus cinclus. Black-bellied Dipper.

Cabrera includes this bird in his Catálogo, 1893, p. 46, on the authority of Berthelot, whom he says cites this species.

I can find no mention of it anywhere in 'Ornithologie Canarienne,' however.

Troglodytes troglodytes. Wren.

Although Bolle in his paper (J. f. O. 1854, p. 454) cited above remarks that Ledru includes the Wren in his list, I cannot find any reference to it in Ledru's work. It is cited by Cabrera (Catálogo, 1893, p. 39), also Polatzek (Orn. Jahrb. 1909, p. 123) on the authority of Ledru, but he may have been simply quoting Bolle (*supra*). Webb & Berthelot do not mention the Wren in their 'Ornithologie Canarienne,' but Bolle notes that Berthelot, after first doubting its occurrence in the Archipelago, finally confirmed it verbally to him. Curiously enough, Bolle omits the species altogether from his final list (J. f. O. 1857).

Hirundo rustica savignii. Savigny's Swallow.

Cabrera wrote (Catálogo, 1893, p. 37) that *Hirundo savignyi* Steph. was particularly rare, an accidental visitor

having been cited by Godman as shot in the island of Tenerife. He says he had a specimen in his collection killed in November at Laguna.

Godman does not mention this Swallow in his paper (Ibis, 1872).

Hartert (Nov. Zool. 1901, p. 307) went through Cabrera's collection in Tenerife in 1901 and could not find any skin of this species; he is convinced that Cabrera wrongly identified the bird he mentions.

Picus viridis. Green Woodpecker.

The Green Woodpecker is said by Cabrera (Catálogo, 1893, p. 35) to have been first mentioned in Viera's work (Diccionario de Historia Natural de las Islas Canarias, 1866). The description, however, on p. 176 under *Peto* (*Picus*) does not apply to the Green Woodpecker, but to the Pied, which is resident in Tenerife and Gran Canaria at the present day. Next it is included in Serra's 'Ornithologia Canaria' (according to Cabrera), but this work I have not seen.

Cabrera himself includes it as an accidental visitor on the authority of the above, noting that it is also included in Berthelot's book. This is not the case, however. Berthelot did not include the species in his 'Ornithologie Canarienne.' Considerable confusion seems to have taken place over this species.

Glaucidium siju. Cuban Owlet.

As shown by Tristram and Meade-Waldo, Koenig (J. f. O. 1890, p. 336) was badly hoaxed over this species (*Glaucidium siju* (D'Orb.)) by Ramon Gomez, the Orotava chemist and bird-stuffer. The bird was imported from Cuba! It appears in most authors' lists, but always (luckily) with the true explanation of its occurrence in the Canary Islands. *Cf.* Tristram and Meade-Waldo (Ibis, 1891, p. 616; 1892, p. 182; 1893, p. 186); Cabrera (Catálogo, 1893, p. 34); Hartert (Nov. Zool. 1901, p. 311); Polatzek (Orn. Jahrb. 1909, p. 119), etc.

Vultur ourigourap. Vulture.

Ledru (Voyage aux îles de Ténériffe, etc., vol. i. 1810, p. 178) is responsible for this bird's inclusion here.

Hartert rejects this Vulture from his list and points out (Nov. Zool. 1901, p. 306) that a confusion with the young of *N. percnopterus* has obviously taken place.

I cannot determine what *V. ourigourap* may be. Ledru gives a reference to Buffon, Pl. Enl. p. 427, and the bird depicted in this plate is a young *Neophron percnopterus*, doubtless the cause of the confusion.

Gyps fulvus. Griffon Vulture.

Busto is the author responsible for this bird's inclusion; it appears in his list (Topografia medica, 1864, p. 103).

Cabrera includes it (Catálogo, 1893, p. 29) on the authority of Busto, remarking that it is of accidental occurrence in the Archipelago.

Neophron pileatus. Vulture.

Ledru notes this species (Voyage aux îles de Ténériffe, etc., vol. i. 1810, pp. 178–179).

Cabrera includes it (Catálogo, 1893, p. 29), and remarks: "This species.....is extremely rare in the Archipelago, where I have observed it without doubt in company with the last-named species [*N. percnopterus*]." He notes that Ledru cites it in his list.

Hartert (Nov. Zool. 1901, p. 306) rejects this species from the Canarian list.

Confusion with the young of *N. percnopterus* has surely occurred here.

Aquila maculata. Spotted Eagle.

Mompó gave this species in his list as having been observed in Tenerife (Catálogo de las Aves de Tenerife, 1876, p. 243).

Cabrera notes (Catálogo, 1893, p. 30) that Mompó includes *Aquila nævia* Briss., and remarks that he has doubtless confused it with *Buteo vulgaris* (*Buteo b. insularum*, the island form of the Common Buzzard).

Hartert refers to the bird (Nov. Zool. 1901, p. 306).

Astur gentilis. Goshawk.

Mompó (Catálogo de las Aves de Tenerife, 1876, p. 243) is the only authority for this bird's inclusion.

Cabrera mentions *Astur palumbarius* (Linn.) (Catálogo, 1893, p. 33) on the authority of Mompó.

Hartert (Nov. Zool. 1901, p. 307) points out the impossibility of the above record.

Milvus migrans. Black Kite.

Cabrera is the first author to mention this species, *Milvus niger* Briss. (Catálogo, 1893, p. 31), remarking that it is an irregular visitor. He had no specimens, and confusion with a dark example of *Milvus m. milvus* has probably taken place.

Polatzek wrote (Orn. Jahrb. 1909, p. 119): "Occasionally passing through; no specimens." He does not say that he was quoting Cabrera, but it certainly looks as if he was.

Falco æsalon. Merlin.

Ledru does not include this species in his list (Voyage aux îles de Ténérife, etc., 1810), as is erroneously stated by Cabrera [*supra*] and Polatzek (Orn. Jahrb. 1902, p. 118); neither does Viera include the Merlin in his Dictionary (Diccionario de Historia Natural, 1866), so far as I can make out.

Cabrera wrote (Catálogo, 1893, p. 32) that it was an extremely rare visitor, arriving accidentally from April to May. He noted that it was cited by Viera as well as Ledru!

Cabrera had no specimen, and does not say whether his observations are his own. Those cited by him seem to be non-existent, as already pointed out by Hartert (Nov. Zool. 1901, p. 307).

Falco naumanni. Lesser Kestrel.

First mentioned as a possible straggler to the Canaries by Bolle [*Falco cenchris*, J. f. O. 1857, p. 267].

Next it was (I am almost sure erroneously) recorded by myself from Tenerife, when I mistook for this species a

small example of *Tinnunculus t. canariensis*, the island-race of the Common Kestrel, during my first visit of two days to this island in January 1904 (Field Naturalists' Quarterly, 1904, p. 249).

Phalacrocorax graculus. Shag.

Busto is the first to mention the Shag (Topografia medica, 1864, p. 105).

Cabrera says (Catálogo, 1893, p. 64) that *Phalacrocorax cristatus* Fabr. is more rare than the Cormorant, and notes that it is cited by Busto.

It is evidently this species which Polatzek intended (Orn. Jahrb. 1909, p. 133) under the non-existing name "*P. garrulus*." He includes and numbers it in his list of visitors, indicating that he considers it authenticated, but gives no particular reason for doing so.

As Busto and Cabrera are the only authors who mention this species, and as from his own account it appears that Polatzek never saw a specimen himself, I disagree with him in placing the Shag amongst the authentic visitors, and do not even consider it worthy of a place in Appendix A.

Sula sula. Brown Booby.

Under the name *Sula fulva* Vieill., Cabrera (Catálogo, 1893, p. 64) records a bird as "an accidental visitor according to Serra. I have met with two examples, killed on the coast of Tenerife, in the Scientific collection in the Capital."

In the first place there is no such name as *Sula fulva*, either of Vieillot or of any other author. It is most probably a misprint for *Sula fusca* Brisson = *Sula sula*.

I have not seen Serra's work and so cannot give the original and correct reference. If *S. sula* is indeed the species intended, the skins, if properly identified, were probably brought from the Cape Verde Islands.

Pelecanus onocrotalus. White Pelican.

Although Cabrera says of this species (Catálogo, 1893, p. 64), "This Pelican, which is an extremely rare visitor in the Canaries, has been cited by Berthelot from the Eastern Group," I have been unable to find any mention of it in Webb & Berthelot's 'Ornithologie Canarienne.' They may certainly have published the fact elsewhere, but Cabrera is the first author to include it in his regular list.

Polatzek mentions the Pelican and numbers the species in his list of visitors which have been authenticated, but remarks without any further reference: "It is said to have been seen on the Eastern island" (Orn. Jahrb. 1909, p. 132).

This is not very conclusive evidence that the Pelican has actually occurred in the Archipelago, although it is as likely to do so as many of the species enumerated in this Appendix.

Phaëthon aëtherius. Red-billed Tropic-bird.

According to Cabrera (Catálogo, 1893, p. 66) the first author to mention this bird is Serra (Ornithologia Canaria, 1879–1882), whose work has not been consulted.

Cabrera gives no further information about it himself.

Polatzek (Orn. Jahrb. 1909, p. 133) notes that Ramon Gomez, the Orotava chemist, told him that it was observed in former years. Gomez's word cannot be relied upon to any great extent—witness the Cuban Owl!

Ardea goliath. Giant Heron.

Serra (Ornithologia Canaria, 1879–1882), whose work I have not seen, is responsible for this record, according to Cabrera (Catálogo, 1893, p. 62), who includes *Ardea goliath* Brehm in his list on Serra's authority.

Anthropoides virgo. Demoiselle Crane.

Busto (Topografia medica, 1864, p. 104) notes this species in his work as *Ardea virgo*.

Cabrera includes it (Catálogo, 1893, p. 61) on the authority of Busto.

Hæmatopus ostralegus. Oystercatcher.

The Oystercatcher is first mentioned by Busto (Topografia medica, 1864, p. 105).

Serra, according to Cabrera, also includes it (Ornithologia Canaria, 1879–1882).

Cabrera remarks (Catálogo, 1893, p. 57) that it is an accidental visitor cited by Busto and Serra, but gives no further details.

Larus gelastes. Slender-billed Gull.

This Gull is first mentioned from Tenerife by Mompó (Catálogo de las Aves de Tenerife, p. 258). He mentions no specific occasion when it was taken.

Cabrera includes it (Catálogo, 1893, p. 66) on Mompó's authority.

Although the Slender-billed Gull might easily occur in the Canaries, it is more probable that the bird observed was *Larus ridibundus* in winter plumage, which somewhat resembles it at this season.

Larus minutus. Little Gull.

Mompó is again made responsible for the inclusion of this Gull in the Canarian list.

Cabrera includes it in his list (Catálogo, 1893, p. 66) on Mompó's authority, but I can find absolutely no reference to *Larus minutus* in the latter's work (Catálogo de las Aves de Tenerife, 1876).

Sterna albigena. White-cheeked Tern.

This Tern, *Sterna albigena* Licht., is included by Polatzek (Orn. Jahrb. 1909, p. 133) in his list of birds not properly authenticated; he notes that it is rare in the Archipelago, but does not say from whom he gets his information. He may have confused *Sterna senegalensis* Swains. (=*S. macrura*) and recorded by Cabrera (Catálogo, p. 67) with *Sterna senegalensis* Heugl. (=*S. albigena*).

In any case the record is worthless, *S. albigena* is extremely unlikely ever to have occurred.

Sterna paradisea. Arctic Tern.

Cabrera includes *Sterna senegalensis* Swains. apparently on his own authority (Catálogo, 1893, p. 67) as rarely occurring in the Canaries. He had no specimens and gives no further information. There is no reason why the Arctic Tern should not turn up in the Canary Islands in winter, but till now we have no authentic record of its having been found there.

Hydrochelidon nigra. Black Tern.

Mompó is responsible for the record of this species (Catálogo de las Aves de Tenerife, 1876, p. 258). His notes are merely general and do not refer to the bird in the Canary Islands.

Cabrera includes *Hydrochelidon fissipes* Linn. as an accidental migrant (Catálogo, 1893, p. 67) cited by Mompó.

Uria grylle. Black Guillemot.

Cabrera notes (Catálogo, 1893, p. 69) that Viera cites this species as an accidental visitor (Diccionario de Historia Natural de las islas Canarias, 1866).

Viera includes what he calls the "Tahoce (Uria)" on p. 269 of his Diccionario, but the long description which he gives does not fit the Black Guillemot. It is more like the Common Guillemot, but it may be noted that the "Tahoce" of the Canary Islanders to-day is the Madeiran Allied Shearwater (*Puffinus assimilis baroli*)!

Alle alle. Little Auk.

Mergulus alle (Linn.) was erroneously recorded by Godman (Ibis, 1872, p. 224) from the Canaries, who says "like many sea-birds this species is said to be more numerous in the eastern Canaries, though found occasionally throughout the group." Godman gives the references from which he obtains his information as "*Alca minor* Webb & Berthelot, Orn. Canarienne, p. 41; Bolle, J. f. O. 1855, p. 177." Now *Alca minor* of Brisson (who is the author quoted by both Webb & Berthelot and Bolle

in their papers cited by Godman) is the Razorbill and not the Little Auk. Godman's error has been copied by Cabrera (Catálogo, p. 70), where he notes that the bird is included in his list on Godman's authority. This unfortunate mistake of Godman's has also led to the inclusion of the Canaries in the "General Distribution" of the Little Auk as given in the New B. O. U. List of British Birds, 1915, p. 280, where it is noted "In winter it visits the North Sea and Atlantic, being found occasionally in numbers as far south as the Canary Islands and the Azores." Godman (Ibis, 1866, p. 102) appears to have handled a specimen from the Azores—which he certainly did not do in the Canaries,—and the Azores Archipelago must be taken as the extreme limit of its southern range, and then only as an occasional straggler.

Macronectes giganteus. Giant Fulmar.

Appears to have been first mentioned by Serra (Ornithologia Canaria, 1879–1882) from the island of Tenerife.

Procellaria gigantea Gmel. is cited in Cabrera's list (Catálogo, 1893, p. 66) on Serra's authority. The usual range of this species is, according to Godman's Monograph (p. 262), south of the 30° S. latitude.

Diomedea exulans. Wandering Albatros.

According to Cabrera (Catálogo, 1893, p. 64), Serra in his work (Ornithologia Canaria, 1879–1882), which I have not seen, mentions that this Albatros has been killed in the Canaries.

The farthest north I have ever seen this species was lat. 18° 51′ S., long. 4° 43′ E., on 5 August, 1908, when returning from Cape Town.

Rallus aquaticus. Water-Rail.

First mentioned from the islands in Mompó's work (Catálogo de las Aves de Tenerife, 1876, p. 256), where it is said to be a bird of passage in winter and very rare; also, according to Cabrera (Catálogo, 1893, p. 60), it is noted by

Serra (Ornithologia Canaria). Cabrera includes it on the authority of these two authors.

Unfortunately it is erroneously stated to occur occasionally in the Canary Islands in the General Distribution of *R. aquaticus*, given in the B. O. U. List of British Birds, 1915, p. 301—a statement which needs correction in the next edition.

Pterocles alchata. Long-tailed Sand-Grouse.

The Long-tailed Sand-Grouse has been quoted by a number of authors as having occurred in the Canary Islands. Viera is, I believe, the first to mention it. It certainly is not found in the Archipelago at the present day, and I doubt very much whether it has ever been obtained as alleged by Cabrera, who wrote (Catálogo, 1893, p. 54) "it is a species which is met with only in the sandy plains of Fuerteventura." He does not appear to have had a specimen in his collection, and is probably only quoting from Viera's account. Bolle scouts the idea entirely (J. f. O. 1857, p. 333).

Polatzek, commenting on Cabrera's note, remarks that the only sandy plains in Fuerteventura are on the south of the island. He adds nothing in support of the bird's occurrence (Orn. Jahrb. 1909, p. 20).

In Ledru's List of the Birds of Tenerife, published in 1810, vol. i. p. 186, Mons. Sonnini adds a note to the effect that "Le Faisan" (*Phasianus colchicus*) is common in Fuerteventura and Lanzarote (!) Needless to say the Pheasant has never been heard of in either of these islands, but it is possible that later writers, knowing that a species of Sand-Grouse inhabited Fuerteventura, should have jumped to the conclusion that it was *P. alchata*, this being the bird which Sonnini believed to be a Pheasant.

Savile Reid (Ibis, 1888, p. 77) gives the most likely explanation of what may have given rise to the rumour.

Viera (Diccionario de Historia Natural de las islas Canarias, p. 306) gives a description of a *Pterocles* (which he calls *Lagopus pyrenaica*) of which the following is a translation: "A bird of the family of the Gallinules, and of the size of a

Partridge, whose beak is nearly straight, with the nostrils at the base of the upper mandible united to the feathers of the forehead. Its wings are long. From the tail start two feathers half as long again as the others, getting gradually thinner till they terminate in a point. The head, neck, and shoulders show several points and spots, which are black, greenish, and red, while the lower portion of the body is black. The feet are ashy, covered with a feathery down, claws black. On the throat are three black lines, like a necklace. It breeds in the island of Fuerteventura." Reid thus correctly translates the Spanish version which I have myself studied. Savile Reid comments that this description would seem to apply to *P. alchata* except that the abdomen is given as black as in *P. arenarius*, and suggests that both species may have occurred and the descriptions got mixed up. *P. arenarius orientalis* is, of course, the common resident species in Fuerteventura.

I think we may safely dismiss from our minds all likelihood of *P. alchata* having occurred in the Canary Islands.

Phasianus colchicus. Pheasant.

As already recorded under *Pterocles alchata*, the first mention of the Pheasant in the Canary Islands comes from Sonnini who, in Ledru's List of the Birds of Tenerife, vol. i. 1810, p. 186, adds a note to the effect that "Le Faisan" (*Phasianus colchicus*) is common on "Lancerote et à Fortaventura."

We next find "*Gallus phasianus*" appearing in Busto's extremely unreliable list (Topografia medica, 1864, p. 104).

Numida sp. Guineafowl.

Busto (Topografia medica, 1864, p. 104) includes a *Meleagris* in his list. If Guineafowls ever inhabited the Canary Islands—which is extremely unlikely—they must have been imported from the Cape Verde Islands, or from the mainland, where they are numerous. The record is worthless.